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10/823,980	04/13/2004	Jeffrey M. Greenberg	2004P06006US	5326

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Elsa Keller, Legal Administrator  
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Intellectual Property Department  
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EXAMINER
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WOODS, TERESA S

ART UNIT	PAPER NUMBER
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3686

MAIL DATE	DELIVERY MODE
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11/23/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/823,980	<b>Applicant(s)</b> GREENBERG, JEFFREY M.	
	<b>Examiner</b> TERESA WOODS	<b>Art Unit</b> 3686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 54-69 and 100-111 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 54-69 and 100-111 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. This communication is in response to the amendment filed 09/23/10.
2. Claims 54 and 62 have been amended.
3. Claims 1-53 and 70-99 have been cancelled.
4. Claims 54-69 and 100-111 are currently pending and have been examined.

### ***Response to Arguments***

5. Applicant's arguments have been fully considered, but are now moot in view of the new grounds of rejection. The Examiner has entered a new rejection under 35 USC § 103(a) and applied new art and art already of record.

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.
2. Claims 54-69 and 100-111 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See *In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) **typically covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent**. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See *In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. §101*, Aug. 24, 2009; p. 2.

The USPTO recognizes that applicants may have claims directed to computer readable media that cover signals *per se*, which the USPTO must reject under 35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject matter. In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. **A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments** to avoid a rejection under 35 U.S.C. § 101 by **adding the limitation “non-transitory” to the claim**. Cf. *Animals - Patentability*, 1077 Off. Gaz. Pat. Office 24 (April 21, 1987) (suggesting that applicants add the limitation “non-human” to a claim covering a multi-cellular organism to avoid a rejection under 35 U.S.C. § 101). **Such an amendment would**

***typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals per se.*** The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal *per se* is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. See, e.g., *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 54-69 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Brant (US 5,970, 457 A) in views of Mattson (US 5,303,148 A).

9. **Claim 54:**

Brant, as shown, discloses the following limitations:

- *(a) receiving a voiced command from a voice input device of an ultrasound imaging system to insert a textual phrase into a section of an ultrasound examination report (B, See at least column 2, lines 29-48, column 10, lines 33-39).*
- *(c) with the ultrasound imaging system, converting the received voiced command into a textual phrase selected from the set of textual phrases identified in (B, See at least column 2, lines 29-48, column 8, lines 34-40, column 9, lines 29-36, column 81, lines 25-30).*

However, Mattson discloses a similar system provided below:

- *(b) with the ultrasound imaging system, identifying a set of textual phrases associated with the section (M, See at least column 3, lines 20-50).*
- *(d) with the ultrasound imaging system, inserting the textual phrase selected in (c) into the section (M, See at least Fig. 4, column 3, lines 20-50).*

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the textual phrase features of Mattson to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

10. **Claim 55 & 63:**

Brant and Mattson disclose the limitation mentioned above. However, Brant further discloses *further comprising receiving a voiced request to create an ultrasound examination report, the ultrasound examination report comprising a plurality of sections associated with a respective set of textual phrases* ( B, See at least column 12 lines 1-5). Here, the status report features serves as an examination report.

11. **Claim 56 & 64:**

Brant and Mattson disclose the limitation mentioned above. However, Brant further discloses *further comprising automatically displaying a set of available voice commands associated with the section* (B, See at least Fig. 6-10, column 7, lines 58-63). Here, the list of commands serves as displaying a set of available voice commands.

12. **Claim 57 & 65:**

Brant and Mattson disclose the limitation mentioned above. However, Brant further discloses:

- *(e) receiving a voiced request for a display of a set of available voice commands associated with the section* (B, See at least column 2, lines 29-48, column 10, lines 33-39).

- *(f) displaying the set of available voice commands associated with the section in response to the voiced request received in (B, See at least Fig. 7-10, column 7, lines 3-20 and lines 58-63).*

**13. Claim 59 & 67:**

Brant and Mattson disclose the limitation mentioned above. However, Brant further discloses *wherein (a) comprises receiving a voiced command to insert a textual phrase into a section of an ultrasound examination report displayed on an ultrasound review station* (B, See at least Fig. 1, Fig. 15A, column 3, lines 39-56).

**14. Claim 60 & 68:**

Brant and Mattson disclose the limitation mentioned above. However, Brant further discloses:

- *(e) receiving a voiced request to insert an image into a section of the ultrasound examination report* (B, See at least column 12 lines 1-5)
- *(f) inserting the image into the ultrasound examination report in response to the voiced request received in* (B, See at least column 12 lines 1-5)

**15. Claim 61 & 69:**

Brant and Mattson disclose the limitation mentioned above. However, Brant further discloses:



- *(e) receiving a voiced request to edit a section of the ultrasound examination report (B, See at least column 12 lines 1-5)*
- *(f) editing the section of the ultrasound examination report in response to the voiced request received in (B, See at least column 12 lines 1-5).*

16. **Claim 62:**

Brant, as shown, discloses the following limitations:

- *(a) receiving a voiced command from a voice input device of an ultrasound review station to insert a textual phrase into a section of an ultrasound examination report (B, See at least column 2, lines 29-48, column 10, lines 33-39).*
- *(c) converting the received voiced command into a textual phrase selected from the set of textual phrases identified in (B, See at least column 2, lines 29-48).*

However, Mattson discloses:

- *(b) with the ultrasound imaging system, identifying a set of textual phrases associated with the section (M, See at least column 3, lines 20-50).*
- *(d) with the ultrasound imaging system, inserting the textual phrase selected in (c) into the section (M, See at least Fig. 4, column 3, lines 20-50).*

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the inserted textual phrase features of Mattson to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

17. Claims 58 and 66 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Brant (US 5,970, 457 A) in views of Mattson (US 5,303,148 A) further in view of Gould (US 6,088,671 A).

18. **Claim 58 & 66:**

Brant and Mattson disclose the limitation mentioned above. However, Gould further discloses *wherein (a) comprises receiving a voiced command to insert a textual phrase into a section of an ultrasound examination report displayed on an ultrasound imaging system (G, See at least Fig. 15A, column 9, lines 41-58).*

Here, the sample appointment notes display similar features as an inserted ultrasound examination report. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the inserted textual phrase features of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

19. Claims 100-111 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Brant (US 5,970, 457 A) in views of Gould (US 6,088,671 A).

20. **Claim 100:**

Brant, as shown, discloses the following limitations:

- *receiving a voice signal from a voice input device of an ultrasound imaging system* (B, See at least Fig.7, Fig.10, column 7, lines 3-20).
- *with the ultrasound imaging system, inserting the text into an ultrasound examination report* (B, See at least Fig.7, Fig.10, column 7, lines 3-20).

However, Gould discloses:

- *with the ultrasound imaging system, converting the voice signal into text* (G, See at least Fig. 2, Fig. 4, column 4, line 49 to column 5, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the selected voice command features of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**21. Claim 101:**

Brant and Gould disclose the limitation mentioned above. However, Brant further discloses *wherein (b) comprises converting the voice signal into text using a voice recognition unit of the ultrasound imaging system* (B, See at least column 2, lines 29-49).

**22. Claim 102 & 108:**

Brant, as shown, discloses the following limitations:

- *a voice input device* (B See at least Fig. 1, Fig. 2, column 3, lines 36-53).

However, Gould discloses:

- *a voice recognition unit coupled with the voice input device, the voice recognition unit being operative to convert a voice signal received from the voice input device into text* (G, See at least Fig. 2, Fig. 4, column 4, line 49 to column 5, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the converted voice signal of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**23. Claim 103 & 109:**

Brant and Gould disclose the limitation mentioned above. However, Brant further discloses *wherein the voice recognition unit is further operative to provide the text to an ultrasound examination report* (B, See at least Fig. 7-10, column 7, lines 3-20 and lines 58-63).

24. **Claim 104:**

Brant and Gould disclose the limitation mentioned above. However, Gould further discloses *further comprising a processor coupled with the voice input device, wherein the voice recognition unit is implemented with the processor* (G, See at least Fig. 1, column 2 line 64-67). ). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the voice implemented processor device of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

25. **Claim 105:**

Brant and Gould disclose the limitation mentioned above. However, Gould further discloses *further comprising a processor coupled with the voice input*

*device and the voice recognition unit (G, See at least Fig. 1, column 2 line 50-67). ). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the voice recognition device of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.*

**26. Claim 106:**

Brant, as shown, discloses the following limitations:

- *(a) receiving a voice signal from a voice input device of an ultrasound review station (B, See at least column 2, lines 29-48, column 10, lines 33-39).*
- *(b) with the ultrasound review station, converting the voice signal into text (B, See at least column 2, lines 29-48).*

However, Gould discloses:

- *(c) with the ultrasound review station, inserting the text into an ultrasound examination report (G, See at least Fig. 4, column 5, line 55 to column 6, line 2).*

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the ultrasound review station of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any

person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**27. Claim 107:**

Brant and Gould disclose the limitation mentioned above. However, Brant further discloses *wherein (b) comprises converting the voice signal into text using a voice recognition unit of the ultrasound review station* (B, See at least column 2, lines 29-48, column 10, lines 20-33).

**28. Claim 110:**

Brant and Gould disclose the limitation mentioned above. However, Gould further discloses *further comprising a processor coupled with the voice input device, wherein the voice recognition unit is implemented with the processor* (G, See at least Fig. 1, Fig. 4, Fig. 10, column 2, lines 64-67, column 4, line 49 to column 5, line 2). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the voice implemented processor device of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**29. Claim 111:**

Brant and Gould disclose the limitation mentioned above. However, Gould further discloses *further comprising a processor coupled with the voice input device and the voice recognition unit* (G, See at least Fig. 1, Fig. 4, Fig. 10, column 2, lines 64-67, column 4, line 49 to column 5, line 2). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Brant so as to have include the processor device of Gould to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.



***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Teresa Woods** whose telephone number is **571.270.5509**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Jerry O'Connor** can be reached at **571.272.6787**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

/T. W./  
Examiner, Art Unit 3686  
11/20/10

/Gerald J. O'Connor/  
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